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THE SOCIAL CONTEXT OF CHILDCARE PRACTICES AND CHILD MALNUTRITION DURING NIGER'S RECENT FOOD CRISIS

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Abstract

In 2004-05, Niger suffered a food crisis, during which global attention focused on high levels of acute malnutrition among children. In response, decentralised emergency nutrition programmes were introduced into much of southern Niger. However, child malnutrition is a chronic problem in Niger and links between food production, household food security and child malnutrition are not straightforward. This paper reports on a qualitative, anthropological study undertaken in Tahoua and Illéla Districts of rural Niger in the aftermath of the food crisis, investigating the pathways by which children are rendered vulnerable in the context of a nutritional 'emergency'. It focuses on household-level decisions that determine resource allocation and childcare practices, in light of wider household- and community-level dynamics. This contextualisation helps to explain why practices that are apparently detrimental to children's health persist. Risk aversion, the need to maintain self-identity and status, and constrained decision-making, all brought about by long-term livelihood insecurity, result in a failure to invest extra necessary resources in faltering children. Negotiations of beliefs, gender roles and bargaining power within social networks are also crucial. Understanding and responding to these aspects of the social context of child malnutrition will help humanitarian workers to integrate their efforts more effectively with longer-term development programmes aimed at improving livelihood security.

INTRODUCTION AND AIMS

In 2004-5, Niger suffered a food crisis, during which global attention became focused on high levels of acute malnutrition among children and high rates of infant and child

mortality. In response, decentralised emergency nutrition programmes, targeted mainly at children under five, were introduced into many of the affected areas of southern Niger. Nearly two years later (at the time of writing), the emergency nutrition programmes are still operating widely, albeit with reduced admissions over recent months. Acute malnutrition has decreased among under 5s over the last year, but remains highly prevalent. Emergency nutrition programmes have reported high rates of non-cured discharges and drop-outs from the programme (FEWS NET, 2006: 6; Unicef Niger, 2006). It is widely accepted that the 2004-5 emergency was in fact an extreme manifestation of a long-term problem, and that a much broader response is required to tackle it (Baro & Deubel, 2006).

In this context Concern Worldwide, one of the agencies delivering the humanitarian programme, commissioned an anthropological study, early in 2006, with the aim of improving understanding of the social context of child malnutrition and, in particular, to examine care practices and household decision-making in relation to the nutritional vulnerability of children. In this paper, we aim:

- (1) To describe childcare practices that, alongside poor household food security and health conditions, contribute to the nutritional vulnerability of children in part of Niger;
- (2) To explore underlying social, cultural and economic factors underpinning apparently detrimental childcare practices.

BACKGROUND AND THEORETICAL FRAMEWORK

The food crisis in the context of chronic food insecurity in Niger

Niger is one of the world's poorest countries, ranking 177th of 177 countries on the UN Human Development Index, a composite measure encompassing life expectancy, literacy, school enrolment and Gross Domestic Product (UNDP, 2006). In 2004, poor rains and locust invasion led to poor harvests and widespread food shortages in Niger (and throughout the Sahel). Although the 2005 harvests were substantially better, food security remained poor. Strategies adopted to cope with the previous year (including selling livestock, incurring debts, out-migration of men) had undermined longer-term livelihood security (resilience of household livelihood systems to shocks), leaving many families in a precarious position (Daulaire, 2005; Kapp, 2005).

However, Baro and Deubel (among others) argued that the situation in 2004-05 was “not a transitory emergency but a permanent feature of mounting vulnerability” (2006:529). Growing population pressure, weak markets, land degradation, reduced income-generating opportunities, poor access to health services and sanitation, poor status of women, and harmful traditional feeding practices all conspire to render many Nigeriens vulnerable to food insecurity and malnutrition (Baro & Deubel, 2006; Daulaire, 2005; Kapp, 2005). This paper describes the social context of child malnutrition in two of the worst affected areas, Tahoua and Illéla Districts.

Responses to the food crisis

In these districts, emergency nutrition programmes for children were implemented by several agencies, including Concern Worldwide. Admission to Concern's programme was based on screening using anthropometric measures: firstly MUAC (middle-upper arm circumference), then weight for height. Those with moderate or severe acute malnutrition were given nutritionally dense food supplements (PlumpyNut and Unimix) and medical care, and their progress was monitored until they had reached appropriate weight and were discharged from the programme. In addition, families of children participating in the programme received a one-off ration of staple foods. While many of the agencies involved were also running longer-term development programmes, the emergency nutrition programmes were initially intended as short-term relief efforts, targeted at saving the most vulnerable children (with risk determined by anthropometric status). Alongside the distribution of food supplements and medicines ran limited water and sanitation programmes: providing clean water and latrines at food distribution centres and health centres; giving soap and providing hygiene education to people attending distribution centres.

Children's health and nutritional status

Niger has persistently poor indicators for child health and mortality. In eight surveys conducted between 1996 and 2005, rates of global acute malnutrition (GAM) among children aged 6-59 months ranged from 13.4% to 24.0%, and rates of severe acute malnutrition (SAM) ranged from 1.6% to 5.4%, with no systematic variation over the ten-year period (FEWS NET, 2006). In 2006, rates had improved somewhat (GAM, 10.3%;

SAM, 1.5%). However levels of stunting indicative of chronic malnutrition were high: 39.8% in 2000 and 50% in 2006 (Table 1).

Local data present a similar picture. Concern Worldwide conducted a nutritional and health survey in December 2005 among children aged 6-59 months in Tahoua and Illéla Districts (N=1851). Figures for acute malnutrition were very high (GAM, 14.8%; SAM, 2.4% (Table 1). In addition, high proportions of children were found to be stunted (38%), indicating chronic malnutrition. The 13-24 month olds experienced the highest rates of both acute and chronic malnutrition ($p(\chi^2) < 0.001$ for 13-24 months vs all other ages for both wasting and stunting; figures 1 and 2). No significant gender differences in nutritional status were found.

A year later, as documented in Concern's follow-up survey in December 2006, the situation had substantially improved (GAM, 8.1% and 9.5% for Tahoua and Illéla districts respectively) (Concern Worldwide, 2007). Nonetheless, local communities still experienced rates of high rates of malnutrition: according to WHO, a community-level prevalence of GAM of 5-9% indicates poor nutrition while 10-14% indicates serious malnutrition (Young & Jaspars, 2006). Furthermore, while rates of acute malnutrition were found to vary seasonally (an expected finding, given the region's heavy reliance on subsistence agriculture with a single harvest per year) (cf. Young & Jaspars, 1995a), they remained high throughout the year, never dropping below 8-9% (Concern Worldwide, 2007). The fact that levels of acute malnutrition for all age groups under 5 remain high throughout the year, and even when the peak of the food crisis was over, suggests that

short-term food shortages are not the only cause of malnutrition in this population and that health and/or childcare factors are also implicated¹ (cf. Young & Jaspars, 2006:19). High prevalence rates for infectious diseases/symptoms are documented by both national and local data (Table 1).

Table 1 about here

Figure 1 about here

Figure 2 about here

Causes of malnutrition in children

The relationships between food production, household food access, and child nutritional status are not straightforward. Sen (1981) showed that household access to food (entitlements) can change rapidly in ways that do not necessarily correspond to food production or total food supply. This is supported by Misselhorn's (2005) meta-analysis study in southern Africa, which found that household food security had relatively little to do with levels of cereal production, and was instead driven by an array of social, political, cultural and economic processes.

There is also no guarantee that household food security will mean adequate diets for all members. As Messer (1997:1676) notes: "in households that are food secure, some individuals go hungry; while in households that are food insecure, some may be well nourished." Childcare practices (including infant feeding, food preparation, health-seeking behaviour and supervision of children) can interact with household coping strategies to mean that, even in households that appear to be relatively well-off, children

may be malnourished (Heaton, Forsteb, Hoffmann, & Flake, 2005). For example, working in Darfur, Young and Jaspars (1995a), found no clear relationship between household wealth and acute malnutrition among children during the early stages of famine. This was because both wealthier and poorer households chose to reduce food intake, which might impact particularly on women and children if food was preferentially allocated to men, and because assets owned by wealthier households were not always easy to convert to income. Moreover, biases in the intra-household resource allocation can both result in differential nourishment among children within the same household (Panter-Brick, 2002).

Intra-household dynamics reflect wider cultural and economic realities. Sen (1985; 1990) has described households as arenas of “cooperative conflict”, in which household members have different priorities (e.g., parents prioritizing their own children’s healthcare over that of other children in an extended household) and bargaining power. In Sen’s model, bargaining power depends on differential fall-back positions (how individuals would manage if a bargain were not reached, resulting in household dissolution). In many patriarchal societies, the fallback position of women is worse than that of men, but can improve, together with decision-making power, by earning external income. For example, Pfeiffer et al (2001) found that Mozambican mothers who earned more than was required for daily household needs could spend the remainder as they chose, conferring greater bargaining power.

The relationships between household-level decisions and the wider social, economic and political context are made explicit in Millard's (1994) model, which distinguishes three interlinking tiers of causes of high child mortality. These are:

- (a) proximate: malnutrition and infection;
- (b) intermediate: household food allocation and childcare practices, which lead to inadequate diets for some children and exposure to pathogens;
- (c) ultimate: macro-economic, political, ecological and social factors shaping household food security and health.

While most efforts to reduce child mortality are focused on the intermediate or proximate tiers (e.g. childcare education programmes), Millard argued that many apparently poor childcare practices (e.g., poor quality weaning foods) are not the result of ignorance or "culture", but of poverty and other factors beyond individual or household control constraining parents' choices.

Similarly, Young and Jaspars (2006:7) present a conceptual framework in which the proximate causes of child malnutrition, disease and death are influenced by three main groups of intermediate factors: insufficient access to food; poor public health and inadequate health services; and inadequate maternal and child-care practices. These, in turn, are influenced by resource availability and distribution, political ideology and commitments.

In this paper, we demonstrate ways in which household-level decisions impact on child nutritional vulnerability in part of Niger. We then show how these decisions are constrained by wider economic, social and cultural realities.

THE STUDY

Data were collected as part of a qualitative, anthropological study undertaken in January-February 2006 (some three months after the harvest) in Tahoua and Illéla Districts.

Ethical approval for the study was granted by Durham University.

Area and people

The study was conducted among all three major ethnic groups in the area: Hausa, Fulani and Tuareg. All three practise Islam. Traditionally, the Hausa are agriculturalists, while the Fulani and Tuareg are pastoralists, but loss of agro-pastoral livelihoods in recent years has led to increasing mixing and diversification of livelihood strategies. In particular, large numbers of young men leave to work abroad, mainly in Nigeria and Libya. The Hausa practise polygamy, with extended households comprising a man with his wives and children. The Fulani and Tuareg are almost exclusively monogamous, but several brothers might live together, with their wives and children, in extended households.

Field methods

A range of qualitative methods were used to elicit local understanding and coping practices, with triangulation of material from different sources:

- Semi-structured interviews with the main carers of young children (N=40 mothers, N=6 grandmothers); village chiefs and elders (N=13); key informants (NGO and village health centre staff, traditional birth attendants, traditional healers, and representatives of women's organisations (N=25); and older siblings (9-18 year olds, N=9);
- Feeding and health histories, including 7-day dietary recall for children under 5 (N=44, of whom 35 were over 6 months old);
- Informal focus group discussions with mothers and grandmothers (N=15);
- Extensive consulting and de-briefing meetings with research assistants and staff from Concern Worldwide;
- Direct participant observation, through staying in the villages throughout the period of fieldwork.

Sampling was purposive, to include households with diverse child nutritional status, livelihood security, subsistence system, ethnic group, and distance from health services. Current and recent health status was ascertained from children's growth and health records, which were used to inform the selection of participants; anthropometric data were not specifically collected as part of this study. Semi-structured interviews and focus groups were conducted using interview checklists, adapted for each interview (Drever, 1995). Children's histories and dietary recall were collected using structured interviews. Focus groups were homogeneous with regard to gender, generation and ethnic group. Interviews and focus groups were conducted in Hausa (the *lingua franca*), with two local research assistants translating.

Analysis was undertaken in consultation with local field assistants and key informants, enabling juxtaposition of emic and etic perspectives (Miles & Huberman, 1994). This participatory approach to data analysis helps to ensure that the interpretations make sense locally (Young & Jaspars, 1995b). A series of validity checks was used: where cases were found that did not fit with emergent theory, the theory was re-examined and evaluated in light of those cases (Bernard, 2002).

Where appropriate, to complement qualitative findings, we performed a secondary analysis of local survey data (Kokere, 2006), although the scope of this quantitative review was limited due to lack of baseline data and ambiguity in the phrasing of some survey questions.

RESULTS

Results are presented in two parts. First, we report on the intermediate-level factors that contribute to the nutritional vulnerability of children in this part of Niger. While household access to foods and public health services are clearly important, we focus this paper on intra-household care factors, particularly allocation of resources for children. Second, we discuss a range of factors that impinge directly on household-level decisions relating to childcare. These relationships are summarised in figure 3. We draw together interview, recall and observational data to evaluate the range of pathways leading to child malnutrition in this part of Niger, mindful that such pathways are often difficult to

operationalize and that our review of children's vulnerabilities and household dynamics stem from largely qualitative data.

(1) CHILDCARE PRACTICES CONTRIBUTING TO NUTRITIONAL VULNERABILITY

(a) Poor infant feeding practices

A number of common breastfeeding and weaning practices represent serious risk factors for infant nutritional status (cf. Daulaire, 2005). These include delayed initiation of breastfeeding and failure to give colostrum; early introduction of supplementary foods and traditional medicines; and early cessation of breastfeeding.

Mothers commonly delay the initiation of breastfeeding, so as not to give colostrum to the newborn infant. According to the local survey, the proportion of mothers initiating breastfeeding within 3 hours of birth was only 35.0% (N=927 respondents; Concern 2006). Our observations and dietary recall indicate that it is common practice to give regular water-based infusions of medicinal plants during at least the first forty days of life, and also that early supplementation with millet-based foods is widespread. Thus the prevalence of exclusive breastfeeding among infants in Niger is extremely low; recent national data from DHS give a figure of 13.5% for 0-6 month olds (INS-Niger, 2006). Local survey data show that 0% of mothers in Tahoua District and only 11% in Illéla District exclusively breastfed for 4-6 months. The most common reason for cessation of breastfeeding is subsequent pregnancy: 47.7% of breastfeeding mothers in Tahoua District and 66.8% in Illéla District had weaned their infant because of a new pregnancy

(Kokere, 2006). Many mothers recounted a pattern of early supplementation, early subsequent pregnancy, and early and abrupt cessation of breastfeeding.

(b) Failure to direct high quality foods towards young children

The staple diet of young children is of poor nutritional *quality*, even though it is usually sufficient in *quantity*. Our dietary recall and observational data show that the main (and often only) staple food eaten throughout the day is *boule*: millet mixed with much water and, if available, a small amount of sugar and curdled milk. We were not able to conduct nutritional analysis of *boule*; however its variable but high water content and bulk make it unlikely to be nutritionally dense enough for young children who have small stomachs and relatively high nutritional needs. When resources allow, a “family dish” is eaten in the evening (usually millet porridge or rice, with milk or sauce). However, very few children ate such a dish every day.

As supplies from the year’s millet harvest diminished, mothers reportedly added more and more water to the *boule* and the frequency of “family dishes” decreased. Addition of milk to *boule* also varies seasonally, according to availability and cost: milk supply typically diminishes in the dry season and also at times of year when herds are far from the homestead. Dietary recall for 35 children aged 6-60 months, show that 18 (51%) had eaten only *boule* in the preceding 24 hours, while 7 (20%) had eaten only *boule* in the preceding week (with no differences by sex, age (post-weaning) or birth order). *Boule* is left in a calabash for all the family to consume at will. Because it rarely runs out, even in

the pre-harvest hungry seasons, most mothers conclude that all their children have enough to eat:

“I put plenty of boule in the dish and there is always some left over, so I know they have all had enough. If it runs out, I add some more.” (Hausa mother)

While *boule* is available to all household members to help themselves freely, foods of higher quality are distributed more formally. Men are served first, and typically get the best bits (e.g., meat). Children over the age of one eat from a common plate, separately from adults, who thus have little control over how much, or what, each child actually eats.

(c) Poor hygiene practices and uptake of health services

Hand-washing before food preparation, before eating or after defecation was observed very rarely. Moreover, food (particularly *boule*) is often left in an open calabash for up to 48 hours. Agencies running feeding programmes have attempted to improve the situation by providing soap and hygiene education, as well as clean water at distribution centres. However, access to clean water – and in many areas, access to any water - is clearly a major limiting factor in attempts to improve hygiene levels. Only 43% of Niger’s population has access to clean potable water, and 18% to sanitation facilities (Kapp, 2005).

Uptake of preventative and curative health services for children is likewise very poor. Illness histories indicate that children are rarely taken to a health centre for illnesses

considered to be commonplace (i.e. fever, diarrhoea, respiratory infections). 34 children (aged 0-60 months) were reported to have had a serious illness in the preceding six months, of whom 11 (32%) were reportedly taken to a clinic. This probably represents an over-estimate of proportions attending clinics, since observational and interview data strongly suggest under-reporting of illnesses and over-reporting of clinic attendance.

The formal Niger health system operates under the Bamako Initiative, requiring citizens to pay for basic drugs. It is under-resourced in terms of staff, infrastructure, and equipment. Distance, cost and misinformation all prevent parents from taking sick children to health centres; they either do not treat sick children at all, or first access other, less effective, treatment options, particularly the *pharmacies ambulantes* - itinerant, usually untrained, vendors of medicines, who often provide inappropriate treatments, but at low prices and close to home.

In interviews, parents rarely distinguished discrete episodes of these illnesses, seeing them instead as chronic and often intrinsic to a child: “*He has always had malaria.*” Such a child might be taken to the clinic once if parents perceived the situation to be very serious or life-threatening. But if recovery is incomplete or unsustained, further treatment is generally not pursued. This Fulani mother’s account of her malnourished and clearly sick two-year-old daughter is typical: “*Only once, when she was very ill and would not wake up easily, we took her to the clinic. But then she became ill again. Since then, we have just treated her at home.*”

(d) Failure to dedicate extra resources to sick or failing children

Compounding this failure to take sick children for healthcare, it is rare for a child who becomes sick, or suffers a set-back (such as abrupt weaning), to receive extra resources to prevent malnutrition. Sick children are not usually given special foods (high quality or easy to digest); indeed cultural practices of food distribution make it very difficult for parents to single out a child for special treatment. In only one case of abrupt weaning in the feeding histories did the carer (grandmother) give the child special food and extra care, and she acknowledged that she was unusual in doing this.

(2) WIDER CONSTRAINTS ON CHILD-CARE PRACTICES AND HOUSEHOLD DECISION-MAKING

In this section, we unravel some of the wider contextual factors influencing the seemingly detrimental childcare practices described above. As shown in figure 3, we identify four main issues that underpin household decision-making with regard to allocation of resources to children:

- poverty and livelihood insecurity, leading to risk aversion and constrained decision-making;
- identity and status;
- intra-household gender relations and bargaining power;
- negotiation of beliefs and practices.

The broader context of ecology and subsistence practices and the macro-level national and international political economy are beyond the scope of this paper.

(a) Poverty and livelihood insecurity, leading to risk aversion and constrained decision-making

Many informants attested to the long-term nature of child malnutrition. While parents welcomed the efforts of international donors to provide emergency nutrition for their children, they were clearly worried about what would happen when the programmes ended. Long-term livelihood insecurity is a persistent problem in Niger. While many interviewees said that the year 2004-05 had been worse than usual in terms of food security, they also stressed that livelihoods have been poor for the last few decades and that problems of food security were perennial. One Hausa woman summarised the general situation as follows: *“We don’t even harvest enough to last half the year. It is only by the grace of God that we survive”*.

Set against persistent livelihood insecurity, children’s lives are seen as inherently vulnerable. Parents sense that any child may suddenly become ill and die at any time. Parental intervention appears not enough to secure the life of a sick or failing child, as this Hausa mother recounts:

“He [her dead son] was always very little and didn’t drink much milk. We took him to the clinic twice and got medicine for him. But he became ill again and died.”

Parents’ reluctance to invest extra resources in a sick child is part of an understandable risk management strategy (Hampshire, Panter-Brick, & Casiday, forthcoming) Resources used to purchase high quality food or medicines for a sick child must be offset against the

need to maintain productive capital, especially livestock and land. The first part of Fatima's account (case A) illustrates the trade-offs that parents face between the needs of a sick child and maintaining household assets.

Case A here

(b) Identity and status

Other research in food crises has shown that preserving dignity and self-respect are at least as important to people as preserving productive assets and fending off starvation (Chambers, 2006 [1989]; De Wall, 1989; Howe, 2002). Similarly, parents' accounts in Niger emphasised the importance of maintaining dignity and social capital. As Fatima explains (case A), there is a strong social imperative to maintain symbolic capital in the form of her wedding trousseau (decorated plates and calabashes that a woman brings to her new home on marriage), even at the cost of being able to afford medicines for her daughter. Apart from loss of self-esteem, there may be very real costs attached to the loss of social status and capital.

Parents' accounts suggested that considerations of status are one reason that wealth does not appear to protect children from malnutrition in this context (Young & Jaspars, 1995a). For example, one mother from a relatively wealthy household² explained that they had continued to hire wage-labour they could ill afford and were too ashamed to take their child to the emergency nutrition programme. By "losing face" in the short-term, such families would risk forfeiting their position as "big people" within their

village. That status afforded them considerable power over village-level decisions, with potentially far-reaching consequences on their wellbeing.

(c) Intra-household gender relations and bargaining power

Mothers' economic autonomy and decision-making power can constrain their access to nutritional and health resources for their children. This is particularly important in less cooperative households, or in cases of absent husbands. In this part of Niger, men and women tend to control separate budgets, particularly among the polygamous Hausa. Hausa women are reluctant to share their goods with their husbands, since the goods could then end up going to a co-wife. One Hausa woman with a small field of her own reported selling millet to her own husband for the household granary. The monogamous Fulani and Tuareg households are often said to be more cooperative arenas, but the high frequency of divorce discourages spouses from sharing assets. Moreover, in extended Tuareg and Fulani households, there may be considerable lack of cooperation between the different brothers and their wives.

We found substantial differences in mothers' bargaining power, reflected in their ability to secure resources for their children. In extended polygamous households, a mother's status (based on considerations like reproductive success, own family background and perceived sexual desirability) can be critical. As one Hausa woman put it: *"The children of the first wife are more likely to be neglected, while [the father] takes more notice of the children of a new wife."*

Lack of cooperation in extended households becomes particularly important when men are absent on *exode* (labour migration). In Concern's survey, 24.7% of households in Tahoua and Illéla Districts were *de facto* female-headed at the time of the survey (Kokere, 2006). This was due largely to male labour migration, accounting for 76.0% of female-headed households (ibid). Although *exode* of fathers was not found to be associated with child nutritional status (for children aged 6-59m, mean WHZ was -1.12 for those with fathers present versus -1.21 for children with fathers *en exode* (T-test, $p=0.10$)), our qualitative work highlights important but ambiguous effects of *exode* that may be concealed in quantitative data.

Exode can be an important means of supplementing household income, and is acknowledged by both men and women to play a critical role in livelihood security (in case A, Fatima sold her own goats to enable her husband to migrate). However, *exode* often leads to shifts in intra-household power relations and decision-making. Some women gain more control of immediate household resources in their husbands' absence. In other cases, control of household resources is delegated to another family member or neighbour, compromising a woman's ability to negotiate an adequate share of resources for her children (cf. Hampshire, 2006; Ruthven & David, 1995). In Fatima's case, where there is intra-household cooperation and understanding, the absence of a husband can still impinge negatively on a mother's ability to respond effectively to the health needs of her children. In case B, typical of an uncooperative extended family, the woman has limited options and must appeal to her wider social networks.

Box 2 about here

The problems arising from uncooperative households and/or absent fathers can be mitigated if women are able to draw effectively on their own social networks for support. In case B, Hawa's position is improved by having an older sister who is able and willing to provide for her children. An independent source of income can also make a difference. In this respect, Fulani women who sell butter and milk are better off than their Hausa or Tuareg counterparts. For example:

“When my daughter became ill, I took her to Affala [village with health centre]. They gave her an injection and an intravenous drip, which cost 3000F [\$6] ... I paid for the treatment, using the money I got from selling milk in Tahoua.” (Fulani mother, whose husband had migrated)

The practice of seclusion, adopted by conservative families, also limits women's freedom of movement, their ability to earn income independently, or their opportunities to develop, maintain and contact wider social networks.

(d) Negotiation of beliefs and practices

Cultural norms for infant and child feeding also have deleterious outcomes for child health and nutrition.

There is a proscription against breastfeeding while pregnant. The breastfeeding child is believed to be “stealing” milk from its unborn sibling, or a pregnant woman's milk is perceived as “hot” and potentially harmful to a breastfeeding child, causing illness and

even death. Many mothers (particularly Hausa mothers), recognized that abrupt weaning could be harmful, and so introduced supplemental foods early in case they became pregnant again: “*If I become pregnant, it will not be such a shock to [the child], since he is getting used to eating boule*” (Hausa mother). Clearly, there is a serious risk here of creating a self-fulfilling prophecy, whereby short birth intervals are more likely because of early supplementation.

Beliefs about when to start breastfeeding and the value of colostrum were mixed. Many younger women and more recently trained midwives had absorbed the public health message about the importance of early breastfeeding initiation. However, older women and midwives commonly saw colostrum as useless or even harmful to infants. Two midwives we interviewed advocated withholding the breast until several days had passed (giving sugar water in the meantime) and the quality of the milk had been approved (e.g. by checking its colour to prove it was “good”). Fears about having “bad milk” also led some mothers to supplement or wean early. A frequently ill infant was taken as an indication of “bad milk” and withdrawn from the breast at a particularly vulnerable time.

Another cultural belief contributing to mothers’ reluctance to give high quality foods to sick children is the condition known as “*anugu*” (fever and rash), believed to result from giving and then suddenly withdrawing high quality foods, especially milk. Fear of *anugu* extended to the emergency feeding programme, with mothers fearing that children become too accustomed to the high-quality supplemental foods and find it difficult to re-adjust to every-day household foods when discharged. Many compared discharge from

the programme to an abrupt cessation of breastfeeding, in terms of risks to the child, and one woman called it a “second *sevrage*” (a second weaning).

However, it is important to note that beliefs are not static and unchanging, nor are they held in the same way by everyone. Moreover, the relationship between stated belief and practice is not straightforward. Although women ubiquitously stated that mothers, in general, should not continue to breastfeed while pregnant, careful questioning of individual feeding histories revealed a different story. For example, one Fulani woman described how she had concealed her pregnancy for several months in order to continue breastfeeding her son without condemnation. She was not unique among our informants, and it became clear that several women “bent the rules” as far as breastfeeding during pregnancy was concerned. Similarly, despite cultural imperatives to share foods equally and avoid giving special, high quality foods to sick children, it became clear from mothers’ accounts that this was not always followed in practice.

Moreover, beliefs and practice are often subject to negotiation. For example, several young women said that they had been informed by young, recently-trained midwives that babies benefited from breastfeeding immediately after birth; yet they delayed breastfeeding initiation at the insistence of their own mothers. The risks of disobeying one’s mother and potentially damaging relations with the natal family (the major fallback in the event of marital dissolution) were seen to be very substantial. Mothers held particular influence for the first child, since daughters usually return to their natal homes to give birth for the first time. With subsequent children, many were able to ignore their

mothers' advice and start breastfeeding straightaway (without disclosing this to their mothers).

SUMMARY AND POLICY IMPLICATIONS

Childcare practices, including intra-household allocation of food and health resources, must be understood within the range of constraints under which parents operate. These include chronic livelihood insecurity, with the concomitant need to maintain productive assets and social and symbolic capital. There also hinge upon power relations in local households, with shifts of balance for example due to widespread out-migration (exode) and polygamy. Far from being static, childcare practices are subject to continual negotiation.

Pingali *et al* (2005) have argued that successful intervention in situations of protracted crisis must be based on “a multi-disciplinary understanding of communities and their food systems.” In the analysis above, we endeavour to present one part of this picture in relation to Niger. Clearly there are other relevant aspects to this picture, such as ecological, economic and political contexts which we have not reviewed in this paper.

We see several policy implications from this analysis, specifically addressing the range of factors that constrain household decision-making with regard to detrimental childcare practices.

(1) Investing in understanding the social context

We have shown that local beliefs and practices combine with identity, livelihood constraints and processes of negotiation and decision-making within the household to influence children's wellbeing in ways that are not easy to predict without understanding the local situation in some detail. In a crisis situation, undertaking a detailed study might seem to be too costly and time-consuming. However, locally-recruited NGO staff and community workers are usually very knowledgeable about local practices and other factors that lead to child nutritional vulnerability, and this highly nuanced knowledge of local realities, constraints, beliefs and practices could very usefully feed into a more integrated initiative. The challenge for emergency nutrition programmes is to make enough time and space to allow such observations and knowledge to shape the programme, rather than simply employing them to deliver a top-down initiative.

(2) Women's economic autonomy

Our study has shown how mothers' independent income and social networks can increase their ability to secure crucial health and nutritional resources for their children, particularly in the context of male out-migration. It must, therefore, be a priority to increase the economic autonomy of mothers through, for example, income-generating activities or enhancing local micro-credit and savings schemes. However, any efforts to enhance income-generation among mothers must take careful account of the wider context and the constraints (e.g. already high workloads) within which they operate. Practices of seclusion and status within households also impact on what is possible for

women in terms of income generation, so getting the support of other household members (e.g. fathers) might be critical.

(3) Reducing costs of healthcare for children

Humanitarian agencies are now working with the Ministry of Health to address some of the constraints on parents' ability to access curative health care for their children. There is also scope for community-based activities in this area, such as working with local and traditional healthcare providers (often chosen by parents in preference to formal health services because they can be cheaper and more readily accessible) to improve their knowledge of child health, nutrition and hygiene issues. For example, community-based savings and credit schemes can be aimed specifically at providing health insurance for children.

(4) Supporting sustainable dietary improvements for children

As noted above, many parents worried about their ability to continue to provide a high quality diet to their children once they were discharged from the nutrition programme. The diversity and quality of diets could be improved through community-based initiatives to support livestock ownership and gardening, and possibly to produce local versions of food like PlumpyNut. This might also help to reduce concerns about *anugu*. However, alongside initiatives aimed at increasing household access to food, more needs to be done to encourage parents to direct what high quality foods are available towards young and vulnerable children, through increasing awareness of their special nutritional needs. Similarly, better targeted support for breastfeeding should be an integral part of nutrition

programming in Niger, drawing perhaps on the fact that prolonged breastfeeding is endorsed by Islam. With any awareness-raising programmes, it is important to consider carefully which groups to target and how. We have shown that beliefs and practice around infant and child feeding are complex and negotiated, and that mothers do not necessarily have the power to act autonomously. Thus, breastfeeding support programmes should target grandmothers as well as mothers, and education about the nutritional needs of young children should incorporate the extended family, not just the parents.

CONCLUSIONS

The emergency nutrition programmes in Niger have done important work which was much appreciated by the respondents in our study, and programmes providing emergency treatment for already malnourished children have a vital role to play. However, it is now clear to the humanitarian agencies working in Niger that they are dealing with a protracted crisis, which involves moving to a more integrated “twin track approach”, addressing both short-term needs (saving lives) and the longer-term causes of nutritional vulnerability (Pingali et al., 2005: 6). In particular, we have argued that understanding and addressing the wider social, cultural and economic factors that underpin household coping and childcare strategies will be crucial. Tensions between short- and longer-term interventions mean that this is not always easy to achieve in practice (Flores, Khwaja, & White, 2005; Gross & Webb, 2006). However, adequate prevention activities in the broadest sense must also be implemented alongside the treatment programmes, and both should be gradually mainstreamed into health services and livelihoods programmes.

Without this breadth of focus, ‘emergency’ nutrition programme providers may continue to find themselves responding to widespread acute malnutrition in Niger for the long haul.

NOTES

1. Unfortunately, no baseline data on children’s nutritional status in Tahoua and Illéla Districts before the food crisis are available.
2. Data on socio-economic status were not collected systematically, but information on the relative wealth of households was obtained from key informants.

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Figure 1. Percentage of children acutely malnourished (wasting) by age group (weight-for-height Z-scores, WHZ).

Sample size: N=1851 children aged 6-59 months

Source: Kokere, 2006

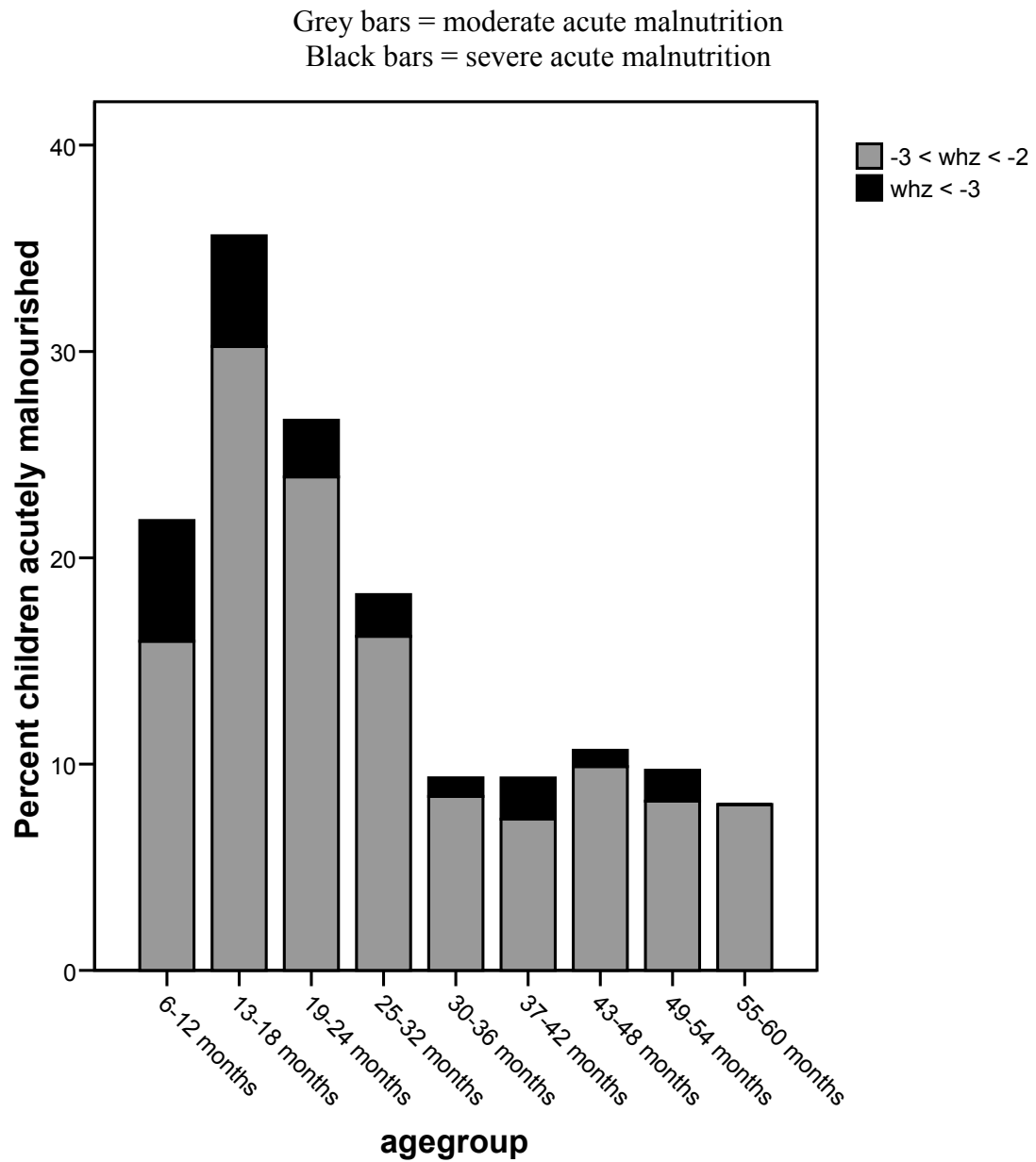


Figure 2. Percentage of children chronically malnourished (stunting) by age group (height-for-age Z-scores, HAZ).

Sample size: N=1851 children aged 6-59 months

Source: Kokere, 2006

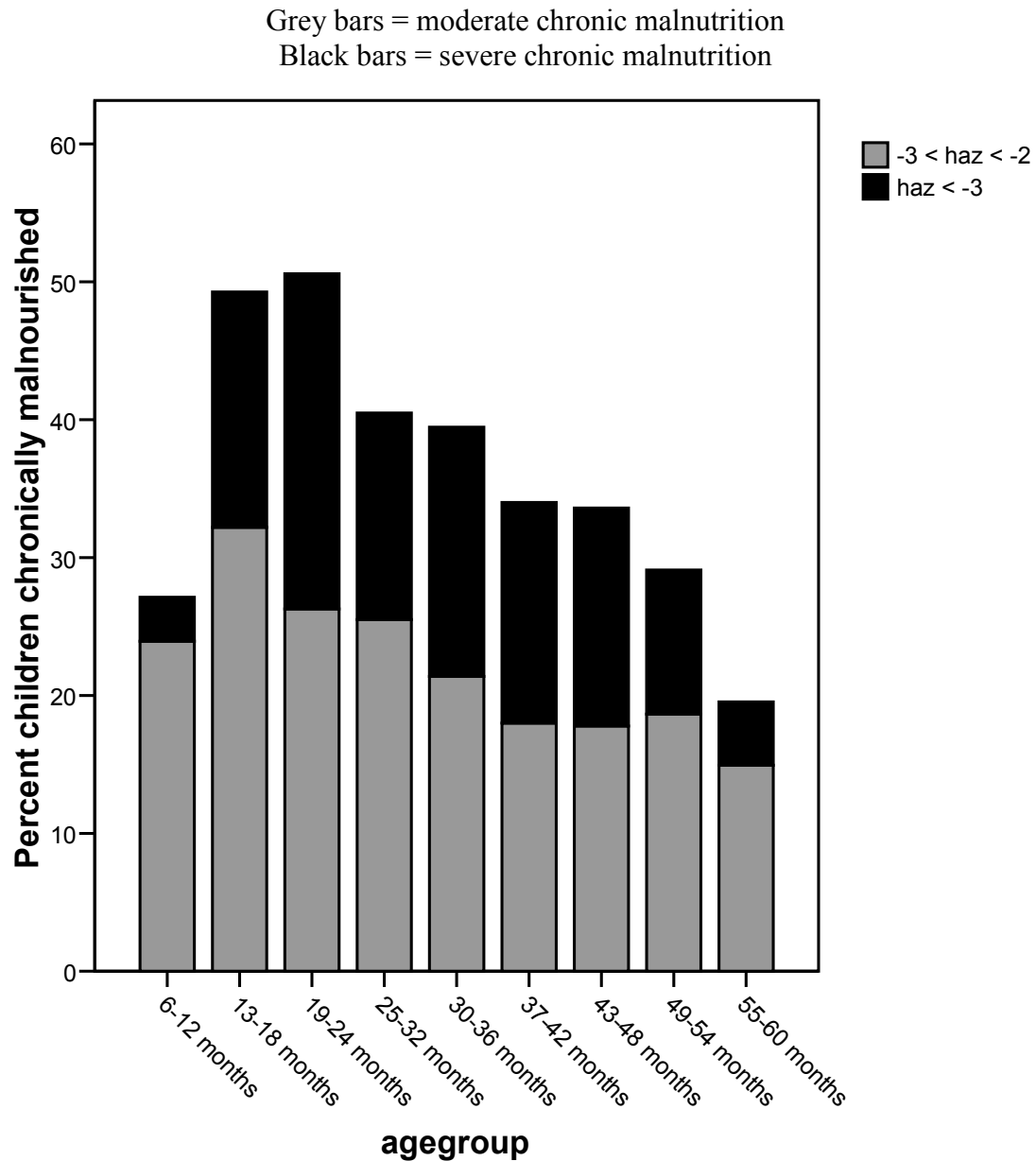
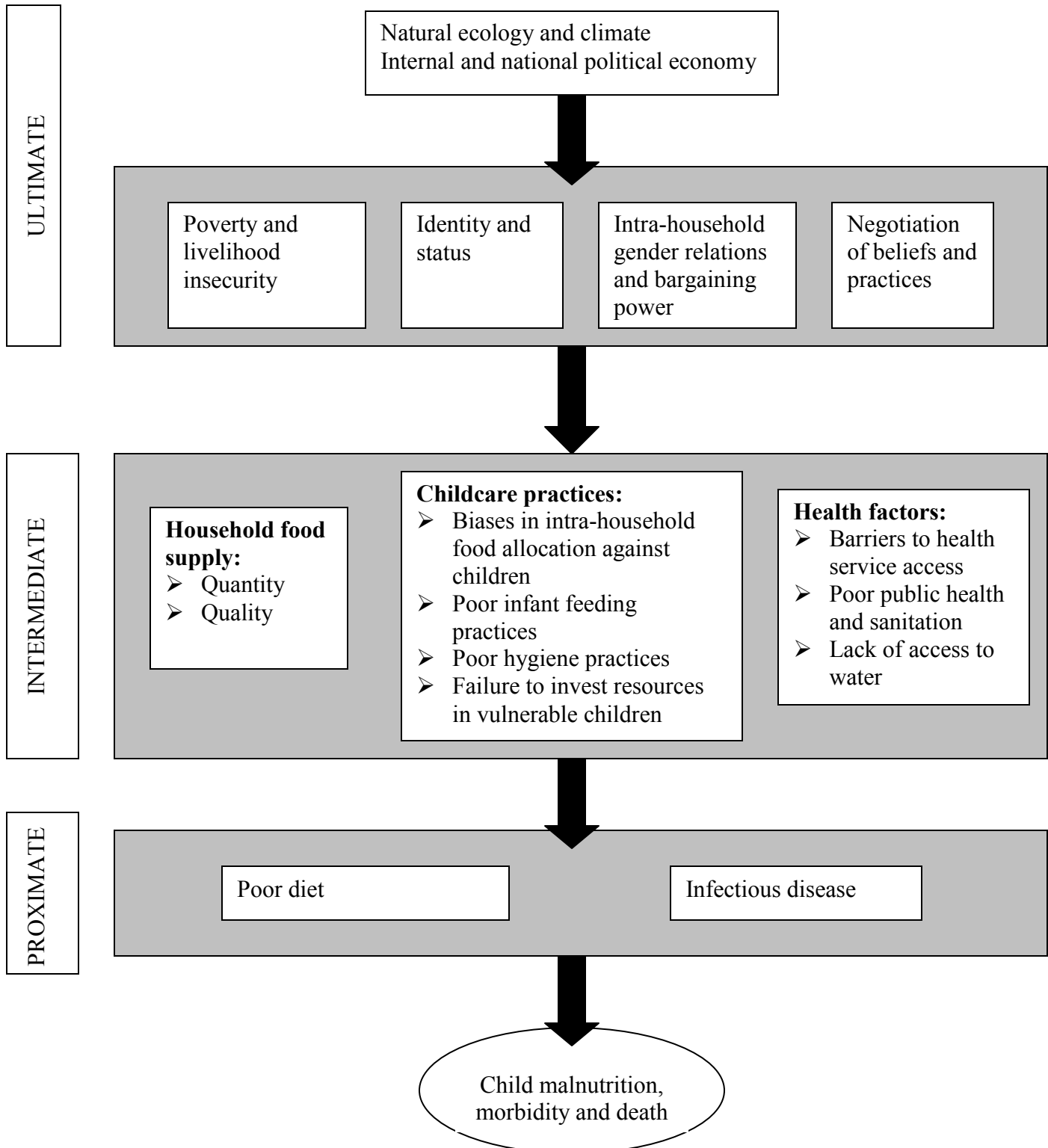


Figure 3: Household decision-making and the social context of child malnutrition in Niger



Case A: Household negotiations and trade-offs between child health, maintaining productive assets and dignity/status.

Fatima (pseudonym) lives in an extended household with her husband (currently away on labour migration, known as *exode*), her three children, and her husband's brother and his family. She talks here of her 18 month-old daughter, who has recently been discharged from the emergency nutrition programme.

Fatima: *My daughter had diarrhoea. After three weeks it was getting no better, and I saw blood in the diarrhoea, so I took her to the CSI [the nearby health centre]. The doctor said that because there was blood in her stools, she had to have pills, which cost 350F, instead of just ORS sachets. This didn't help and after three days we went back again and had to pay 700F. The doctor sent us to another health centre, where we paid 2.500F for injections and intravenous drip.*

KH: *Where did you get the money for the treatment?*

Fatima: *My husband gave me 5.000F. This was the money we had got from selling beans and millet after the harvest. It was supposed to pay for my husband to go en exode. Because we used this money to buy medicine, I had to sell eight of my goats to pay for him to travel. [She explains that her husband's goats were all sold last year.] I only have two goats left, and the milk is not enough for my children. Now my husband is away and my daughter is sick again – she is coughing and has had a fever for several days, but I have no money to take her to CSI. If I sell one of these two goats, we will have nothing left.*

KH: [Pointing to the many plates on the wall] *Could you sell some plates if you need money to take your daughter to the health centre?*

Fatima: *It would be possible for me to sell some plates, but I never have. It would be too shameful to sell even one of them – I could never do that. People would say that my husband is no good. After the harvest, I bought more plates for 4.500F.*

KH: *What about your husband's brother? Will he give you money to take your daughter to the CSI?*

Fatima: *He is kind, and the relations between our two families are good. But it is still harder to get him to help than my husband, when he is here. My daughter has been coughing for the last few nights. If my husband were here, he too would have noticed, and I could have asked him to for money to take her to the clinic. But I don't feel that I can ask his brother for help unless she becomes very seriously ill.*

Case B: Limited options of mothers with migrant husbands and reliance on extra-household networks

Hawa's husband has been on *exode* in Libya for the last three years. She has four living children: none are in the Concern programme, but Hawa worries that they don't have enough to eat. Unprompted, she points to the couple of goats in her courtyard and explains:

Hawa: *If it were up to me, I would sell these goats to buy more food for my children. But I cannot sell them – they belong to my husband.*

KH: *Who decides what happens to the goats while your husband is away?*

Hawa: *My husband's brothers. They live in [another village, several km away] and they refuse to allow me to sell one.*

KH: *Does your husband send you money?*

Hawa: *He rarely sends anything. When he does, he sends it all to his brothers.*

KH: *So how do you manage for food?*

Hawa: *My husband's brothers sometimes buy millet for me. But I never see any of the money myself. My husband has not been here this year to cultivate our field and his brothers have not helped, so I grew millet myself. At least this millet is mine and my brothers-in-law do not touch it. But this year I only harvested 12 bundles and these have already gone. I manage by pounding millet for other women in the village and they give me a bit.*

KH: *What happens if one of your children is ill? Do your husband's brothers help out then?*

Hawa: *Sometimes when one of my children has been ill, I ask my husband's brothers for help, but they have never helped and now I don't bother asking them any more. I have an older sister who is married in [nearby village]. She is like a mother to me. Her husband's family are wealthy and she helps me out.*

Table 1: Health status for children aged 6-59 months: growth (wasting and stunting) prevalence (preceding two weeks) of infections.

	Niger, Surveys from 1996 to 2005 ¹	Niger, 1998 DHS ²	Niger, 2006 DH 3	Tahoua and Illéla Districts, Niger, Survey in Dec 2005 ⁴	Tahoua and Illéla Districts, Niger, Survey in Dec 2006 ⁵
Percentage malnutrition rates					
Wasting: Global Acute Malnutrition, GAM: Z-scores weight-for-height ≤ -2	13.4-24.0	20.7	10.3	14.8	Tahoua: 8.1 Illéla: 9.5
Wasting: Severe Acute Malnutrition, SAM, Z-scores weight-for-height ≤ -3	1.6-5.4	3.7	1.5	2.4	
Stunting: Global Chronic Malnutrition GCM, Z-scores height-for-age ≤ -2		38.0	50.0	38.0	
Percentage infection rates					
Fever		48.3		66	
Diarrhoea		37.8		11	
Acute Respiratory Infections		14.2		10	

Sources: ¹ FEWS NET, 2006; ² DHS 1999; ³ INS-Niger, 2006; ⁴ Kokere 2006; ⁵ Concern Worldwide, 2007.